

PRODUCT BROCHURE

SciMED

Global Brands, Local Support



SciMed.co.uk





Global Brands, Local Support

About SciMed

UK's largest distributor of scientific instrumentation

SciMed have been offering laboratory and analytical instrumentation in process chemistry, elemental analysis, and physical testing for over 45 years.

Exclusively representing global manufacturers with a product line that encompasses over 30 different techniques, SciMed can present clients with the optimum solutions for their analytical needs and provide outstanding client-focused support and service.

Find more on our website at SciMed.co.uk

The SciMed Team



Meet the SciMed Team



Contents

About SciMed	Pg 03	Spectroscopy / PAT / UV-Vis	Pg 26
Market Sectors	Pg 05	Lab Automation Solutions	Pg 27
Suppliers & Partnerships	Pg 06	Elemental and Chemical Analysis	Pg 28-29
Accreditations & Awards	Pg 07	High Pressure Chemical Processing	Pg 30-31
Customer Testimonials	Pg 08-09	Green Technologies	Pg 32-33
Calibration Standards and Certified Reference Materials	Pg 10-11	Materials Characterisation	Pg 34-36
Electrochemistry	Pg 12-13	BET-Surface Area	Pg 37
Batteries and Fuel Cells	Pg 14	Oil Condition Monitoring	Pg 38-39
Particle Sizing	Pg 15	Petroleum Testing	Pg 40-45
Coating Thickness Measurement	Pg 16-17	Process Safety Solutions	Pg 46-47
Electron Microscopy	Pg 18-19	Rheology and Viscometry	Pg 48-49
Elemental and Chemical Analysis	Pg 20-21	Sample Preparation Tools for Elemental Analysis	Pg 50-51
Ion Chromatography	Pg 22	Thermal Methods and Analysis	Pg 52-55
Service Contracts	Pg 23	Ultrasonic Processing	Pg 56-57
XRF Spectroscopy	Pg 24-25		

Market Sectors

SciMed's products and services are used in a broad range of sectors of activity from academic and industrial research to industrial quality and product control as well as into fields of environmental compliance. A summary of the areas of activity is listed below:

ARTS, ANTIQUITIES, MUSEUM	AUTOMOTIVE MANUFACTURING	BIOREFINING / BIOMASS, EXTRACTION	BREWING	CATALYSTS
CEMENT AND BUILDING	CHEMICAL MANUFACTURE	CLINICAL / HOSPITALS	CORROSION	COSMETICS AND PERSONAL CARE
ENERGY STORAGE	ENERGY: NUCLEAR, FUEL, COAL, BIO-FUEL	FINE CHEMICAL	FOOD AND ANIMAL FEED	GEOLOGICAL
MARINE	METAL	MOTORSPORT	NOVEL MATERIALS	OIL AND GAS
OIL CONDITION MONITORING	PETROCHEM	PHARMACEUTICAL MANUFACTURE	PHARMACEUTICALS R&D	PIGMENTS AND INKS
PLASTICS, POLYMERS AND RESINS	TEXTILE	UNIVERSITY TEACHING LAB	ENVIRONMENTAL	WASTE AND RECYCLING



Our Partnerships

At SciMed, we value collaboration and are committed to fostering enduring relationships with our suppliers and customers, as these partnerships are foundational to our business ethos.

With our suppliers, we share a vision of growth and trust, which strengthens relationships and facilitates long-term decision-making. These partnerships allow us to provide unparalleled customer support, maintain high-quality stock, and ensure the best outcomes for our clients.

Our customers are central to everything we do, and we strive to build long-term relationships that result in positive references, continuous improvement, and employee satisfaction. By focusing on customer success, we secure SciMed's future, enabling us to lead and innovate in our industry.



Our Esteemed Partners

Below is a visual representation of our valued suppliers, showcasing the diverse and dynamic network that powers SciMed. Each logo symbolises a unique story of collaboration and mutual growth, underscoring our commitment to quality and innovation.



Accreditations & Awards

ISO 9001 Certification

At SciMed, we are committed to excellence, as evidenced by our ISO 9001:2015 certification, which reflects our dedication to maintaining high standards across all operations.

This internationally recognised standard ensures that our products and services consistently meet customer and regulatory requirements.

Our quality management system, covering the entire organisation, is regularly audited and certified, demonstrating our focus on continual improvement and customer satisfaction.



Cyber Essentials Accreditation



In today's digital age, cybersecurity is crucial, and SciMed's achievement of the Cyber Essentials accreditation highlights our commitment to protecting systems and data against cyber threats.

This UK government-backed scheme helps organisations guard against common cyber attacks, ensuring the security of our clients' information.

Our accreditation demonstrates that we have implemented essential cybersecurity measures and regularly review and update our practices to stay ahead of emerging threats, providing peace of mind to our clients and partners.

Membership of Gambica

GAMBICA

As a member of Gambica, the UK Trade Association for Instrumentation, Control, Automation, and Laboratory Technology, SciMed remains at the forefront of industry developments and standards.

Our membership keeps us connected with the latest advancements and enables collaboration with other industry leaders. By being part of Gambica, we contribute to and benefit from industry-wide initiatives and innovations, adhering to the highest standards and best practices to provide our customers with cutting-edge solutions and services.

Awards and Recognitions

SciMed's commitment to excellence has garnered numerous accreditations and awards from suppliers, partners, auditors, and recognised market influencers.

- Recent accolades include:
- 2023 Awards - Best Internal Marketing Team/Individual 2023 - Stockport Business Awards
 - 2022 Awards - Industrial Process News (Distributor of the Year)
 - Rigaku Champion Award ISM
 - 2021 Awards - Lab Innovation Award (Best Stand Award)





Customer Testimonials

Here at SciMed, we put the wants and needs of our customers first, offering a dedicated and tailored experience at every turn. From browsing our website to purchasing the latest equipment, or getting the best customer support experience. We want to make your journey with us smooth and hassle-free.

Our aim is to create a lasting reputation; one that'll have you coming back time and time again whether your equipment needs a service, or you require an accessory we are here to help. At SciMed, we work hard to maintain the impeccable standards that our customers have come to expect.

We are straightforward, friendly, and knowledgeable. We get to the point without the waffle and put our clients, colleagues, and community at the heart of all we do.

Visit Online



Garry Williams
Technical Services Director Agego TS Ltd

“The ongoing support and the training has been second to none. So it’s enabled all of the staff here to be able to come up to speed with XRF testing extremely quickly. It’s been a great bonus to us.”



Dr. Tony Bell - Head of the X-ray laboratory at Sheffield Hallam University

“John’s new to me, but so far his work’s been great to give us some training after the equipment was installed and I was very impressed.”

CALIBRATION STANDARDS



CONOSTAN Oil Based Calibration Standards



SciMed is an authorised distributor of these world-renowned standards which include:

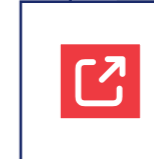
- Sulfur and Chlorine in oil
- Multi Element Standards
- Single Element Standards
- Metals in various oil matrices
- Wear Metals Standards
- Viscosity standards per ASTM D2162.



High-Purity PlasmaPURE Plus Acids



Ultra-high purity acids for trace ICP analysis.
Ultra-low metal contamination
Batch-certified consistency
Optimised for ICP-OES and ICP-MS
Multiple grades available



“The Best Quality at the Best Price” is what defines PlasmaCAL Single Element Calibration Standards for ICP-OES and ICP-MS.”



XRF Application Packages



Through decades of experience, Fluxana have created a comprehensive range of Certified Reference Materials (CRMs) and industry-oriented off-the-shelf application packages based on internationally recognised references. Examples include:

- Cement, raw meal and clinkers
- Iron ores and slags
- Ferro-alloys
- Glasses & MANY MORE.



1



2



5



3



4



6

**1 Reference 620**

The new 620, replacement for the Reference 600+™, is a high-performance potentiostat/galvanostat/ZRA particularly suitable for applications in physical electrochemistry, sensors, coatings, and corrosion.

Key features of the 620 include: Designed for fast, low-current measurements / EIS - 10 μ Hz - 5 MHz.

2 Reference 3020

The Reference 3020 is a high-performance Potentiostat/Galvanostat/ZRA with a maximum current of ± 3.0 A (at ± 17.5 V compliance) and a maximum voltage of ± 36 V (at ± 1.5 A). The Reference 3020 is recommended for battery, electrolyser, or fuel cell development, as well general electrochemical measurements.

3 Interface 1010E

The Interface 1010ETM is an updated version of our extremely popular Interface 1000E. We've extended EIS to 2 MHz and added temperature monitoring. It is a full-featured potentiostat capable of performing all techniques, including electrochemical impedance spectroscopy.

4 Interface 5000E

The Interface 5000E™ potentiostat is a fully-featured potentiostat/galvanostat for battery testing. It is also ideally designed for testing of fuel cells and supercapacitors. Features a second voltage channel for simultaneous anode and cathode measurements.

5 LPI1010

Vehicle electrification is requiring changes in how batteries and fuel cells are tested. Normal potentiostats don't have the voltage and current ranges necessary to test these devices using electrochemical impedance spectroscopy. Gamry solves this issue with its new High Voltage EIS Test System. The LPI1010 gives you the capability to perform EIS up to 1000V on these large systems

6 RxE 10k Rotating Electrode

The new RxE 10k Rotating Electrode is a research grade rotator that can be used with any Gamry potentiostat. Measure mass transport effects at your working electrode or simulate corrosion environments in pipelines. Use with ring-disc, disc, and cylinder electrodes at speeds up to 10,500 rpm!"



Neware Battery Cyclers

Cutting-edge battery testing solutions for research and industry applications.

- High performance battery research instrument
- Reliable charge discharge cycling
- 100 mA to 100 A current options
- Intuitive data monitoring software
- Pouch cells, coin cells and crocodile clip holders.



ICAPPIC Scanning Probe Microscopes

CAPPIC Scanning Ion Conductance Microscopy (SICM) systems for life science imaging and nanoscale electrochemistry. This revolutionary platform offers tailor-made electrochemical microscopes for life sciences and nanoscale chemistry applications.



Neware Environmental Chambers

The solution to accurate battery performance measurements and accelerated stress testing at controlled temperatures.

- Battery testing at fixed temperatures
- High and low temperature control
- Sizes 25 L to 1000 L
- All-in-one systems with temperature control and integrated battery cycling.



Kolibrík High Current Potentiostats

Kolibrík High Current Potentiostats are EIS-capable systems offering +/- 100A four-quadrant devices in a range of specifications.

- High current potentiostat solution
- Ideal for fuel cells, electrolyzers and batteries
- 20A – 100A current options
- 5 V and 10 V options
- EIS from 1 mHz to 100 kHz
- Powerful data logging and processing software.



VASCO KIN Particle Size Analyzer for Real-Time Nanoparticle Measurement



The VASCO KIN analyser combines real-time DLS with a remote, contact-free optical head for in situ nanoparticle sizing and kinetics monitoring.

Handles 0.5 nm–10 µm particles up to 40 % wt, with results every 200 ms and intuitive NanoKin software support.

NanoBrook Series Particle Size and Zeta Potential Analyser



The NanoBrook Series analyser delivers fast, routine sub-micron particle sizing via DLS and accurate zeta potential via ELS/PALS.

With up to three scattering angles, high sensitivity and configurable platform, it handles diverse solvents and sample types confidently.



G-Series

- Entry-level price with compact design and high specs.
- Motorised Z-axis with laser auto-focus for precision.
- High-resolution Silicon Drift Detector included as standard.
- Optional RoHS analysis software for added capability.
- Suited for plating and jewellery low-throughput applications.



L-Series

- Large chamber for deeper profiling of components.
- Handles larger samples with P-series functionality.
- Spacious chamber: 280mm H x 550mm D x 600mm W.
- Optional RoHS analysis software for compliance.
- Perfect for metal finishing with large test items.



P-Series

- Programmable X-Y stage for multi-point, multi-sample measurement.
- Optics-above with motorised Z-axis and laser auto-focus.
- Measures deep profiles up to 63mm focal depth.
- Slotted chamber suits wide PCBs, compact footprint.
- High-resolution SDD with optional high-speed detector.

Premier Manufacturer of World Class, American-Made XRF Plating Measurement Instruments.

PCBs	Large Plated Parts	Electronic Components
Steel & Cutting Tools	Lead Frames	Jewelry
Semiconductors / Wafers	General Metal Finishing	Plating Solution Analysis

Plating Solution Analysis

The management of plating bath components, including both primary components and trace components and additives, is critical to quality and cost control.

Bowman XRF technology provides a high-precision, non-destructive, fast and user-friendly way to analyse the metallic content of plating solutions.

XRF Calibration Standards

XRF Calibration Standards for precisely calibrating any XRF coating thickness and elemental analysis system. We provide single and multi-layer foils, as well as hard-plated standards in every common thickness, for aluminum, cadmium, chromium, cobalt, copper, gold, iron, indium, lead, nickel and electroless nickel, palladium, platinum, rhodium, silver, tantalum, tin, titanium, and zinc.

watch online



High resolution benchtop SEM

- 5nm resolution @30kV, 250,000x mag
- 5-axis motorized stage
- 90 degree tilt function ensures ease of cross-sectional analysis
- 90s sample loading
- Auto gun align and auto focus for ease of use
- Image stitching and 3D surface rendering
- BSE, EDS and Raman options for advanced elemental analysis.



Low kV High Resolution Tungsten-SEM range

- 2.5nm res. @15kV, 300,000x mag
- 0.1 to 30kV acceleration voltage
- 5-axis motorized eucentric stage
- Dual anode for high current @low kV
- Various column designs (electrostatic lenses, booster voltage, inlens detector)
- Low vacuum and plasma cleaning options for difficult samples
- EDS, EBSD, STEM options
- Advanced software options (e.g. particle analysis, automap, imagetech, automeasure).



Ultra High Resolution Schottky FE-SEM range

- Schottky field-emission electron gun for best results
- 0.6nm res. @15kV, 1,000,000x mag
- 0.02 to 30kV acceleration voltage
- 5-axis motorized eucentric stage
- Low vacuum and plasma cleaning options for difficult samples
- Super Tunnel column technology as standard
- EDS, EBSD, STEM options
- Various column designs (electrostatic lenses, inlens detector).

High throughput high volume SEM



- High brightness Schottky FE electron gun
- 1.5nm resolution @1kV, 1,000,000x mag
- Fully automatic sample exchange
- Fast dwell time of 10ns/pixel
- Acquisition speed of 2*100 M pixel/s

Ion Beam Milling



- Purpose-designed solutions for damage-free milling and polishing
- Solutions for SEM, TEM, EBSD, high resolution tomography
- Widest energy range on market 0.1 to 16keV
- Bespoke easily aligned sample holders for sloop cutting and cross-sectioning
- AI-ready software to aid process development.

Mechanical Preparation



- Purpose-designed solutions for damage-free milling and polishing
- Solutions for SEM, TEM, EBSD, high resolution tomography
- Widest energy range on market 0.1 to 16keV
- Bespoke easily aligned sample holders for sloop cutting and cross-sectioning
- AI-ready software to aid process development.

Liquid Sample Accessories



FlowVIEW offers a unique range of solutions enabling users to image liquid suspensions using any Scanning Electron Microscope (SEM) under full vacuum for a wide range of applications.

- Avoid sample dehydration
- Save time on preparation
- In-situ sample observation
- No need for E-SEM.

Unveiling precision with CIQTEK's Field Emission SEM5000.

Mechanical Preparation

Liquid Sample Accessories

Chloride Analysers



The Sherwood Chloride Analysers are used for the determination of Chloride Ions in food, agricultural products, cement, gypsum and the pharmaceutical and water industries.

- Automatic endpoint detection
- Minimal Sample preparation required
- Low running costs.



PQMS ICP-MS

analytikjena
An Endress+Hauser Company



- The fastest ICP-MS available.
- The most sensitive ICP-MS.
- Use both H₂ and He for interference removal; switch modes in one second
- The most economical ICP-MS available – uses less than 50% argon than any other system.



FireFly LIBS Elemental Analysis System by Lightigo



- LIBS-OES for rapid multi-elemental analysis.
- Chemical imaging and mapping.
- Multi-layer depth analysis.
- Flexible laser wavelengths.
- Broad element detection from Hydrogen upwards.
- Measures gases, liquids, and solids.



Flame Photometers



Single and Dual Channel Flame Photometers for the Analysis of Sodium, Potassium, Lithium, Calcium, Barium, Cesium, Rubidium and Strontium.

Autosampler and autodilutor available.



Atomic Absorption Spectroscopy

analytikjena
An Endress+Hauser Company



- A new kind of AAS.
- Multi-element analyses are now possible.
- One continuum light source; all wavelengths for all elements.
- The ContraAA is faster, more sensitive and can handle both liquids and solids analyses.



ICP-OES PQ9200 Elite

analytikjena
An Endress+Hauser Company



- High-resolution array-based ICP-OES for interference-free analysis
- Reports the most accurate results first time
- Can handle any sample matrix including neat organic solvents and high level TDS.
- Working range covers ppt to % level analysis
- Smallest footprint of any ICP-OES
- Uses only 10 l/min argon.



ION CHROMATOGRAPHY



Ion Chromatography Instrumentation

Full range of anions, cations, transition metals, organic acids and amines ion chromatography systems with suppression technology.

- Modular, upgradeable IC configurations
- Self-regenerating suppressor performance
- Excellent separation & low detection limits
- German-made quality & reliability



Combustion Ion Chromatography

SciMed's new CIC system combines the Analytik Jena ICprep and the Sykam S150+ Ion Chromatography systems.

- Compliant with EPA 1621 for PFAS screening.
- Automated pyrohydrolytic combustion.
- From entry-level all-in-one compact systems through to fully automated dual-channel IC instrumentation.
- Uses the latest electrochemical self-regenerating technology to ensure the best analytical performance.



IC Prep

ICprep makes sample prep for ion chromatography etc. easier than ever; transform your lab's efficiency with high throughput and optimized workflows. With smart technology, you can count on fast workflows and precise results, regardless of sample type or quantity.

- Fraction collector up to 100 samples
- Fast switch between liquids and solids
- Range of applications (AOF, AOX, EOF, TF, TOF)
- PFAS screening

SciMed are excited to be able to offer full combustion ion chromatography systems to the Uk market. Anions, cations or PFAS screening are all easy and simple to perform; all matrices with incredibly low levels of detection and automation.

PROTECT YOUR ANALYTICAL INSTRUMENTS WITH SCIMED SERVICE CONTRACTS

Preventative maintenance, priority support and reduced service costs for laboratories across the UK and Ireland.

Why Choose a SciMed Service Contract?

- Reduce unexpected repair costs
- Maintain instrument performance and compliance
- Priority access to engineers
- Reduced hourly service rates
- 20% discount on spare parts

Flexible Service Levels to Suit Your Needs

Features	Quartz Basic	Sapphire Enhanced	Diamond Comprehensive
Preventative Maintenance	Included	Included	Included
PM Parts Included	Included	Included	Included
Emergency Call-Outs	Reduced Contract Rates	Included	Included
Spare Parts	20% Discount	20% Discount	Included

SciMed Service Contracts

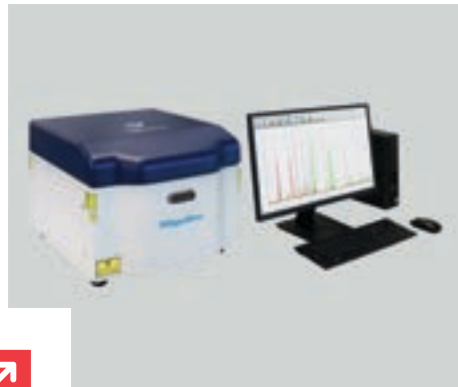


Parr Reactor Service Contracts



Energy Dispersive XRF (ED-XRF)

Rigaku



One of the most flexible and versatile techniques for elemental analysis. The Rigaku range of benchtop Energy Dispersive XRF (ED-XRF) spectrometers offers:

- Rapid, non-destructive elemental analysis
- Direct or indirect excitation for enhanced sensitivity
- Simple-to-use and powerful software for application set-up with zero standards.

Benchtop Wavelength Dispersive XRF (WD-XRF)

Rigaku



Benchtop sequential Wavelength Dispersive X-Ray Fluorescence (WD-XRF) spectrometer for quantitative elemental analysis of solids, liquids, powders and alloys. Compact design and operates without an external chiller, detecting elements from Oxygen to Uranium.

- Benchtop WD-XRF spectrometer
- Elemental range O - U
- Analysis of solids, liquids, powders and alloys.

Vanta Element Handheld XRF Analyser

EVIDENT



The Vanta Element Handheld XRF Analyser is a fast, affordable handheld XRF alloy grade identification tool for UK industry.

- Quick alloy grade identification
- Affordable entry-level handheld XRF
- Rugged IP54/MIL-STD-810G design
- Intuitive touch screen operation

Vanta GX Precious Metal Analyser

EVIDENT



The Vanta GX Precious Metal Analyser delivers rapid, non-destructive XRF testing of gold, silver and precious metal alloys for confident, accurate verification.

- Rapid non-destructive XRF testing
- Analyses gold, silver & precious alloys
- Fast, accurate alloy verification
- Ideal for assayers and refiners

High Power Wavelength Dispersive XRF (WD-XRF)

Rigaku



High power (3-4 kW) sequential wavelength dispersive X-ray fluorescence spectrometer for quantitative elemental analysis of solids, liquids, powders and alloys. It integrates advanced XRF software with a digital multi-channel analyser to enhance analytical performance.

- Tube-Above optics
- Superior light element detection
- Digital multi-channel analyser.

Vanta iX In-Line XRF Analyser

EVIDENT



Vanta iX in-line XRF analyser for automated 100% alloy verification, real-time material analysis and production control.

- Fast elemental analysis and grade ID
- Detects metals, alloys & light elements
- Rugged field-ready design
- Intuitive touchscreen interface
- USB/Wi-Fi data connectivity

NEX OL In-Line Liquid Analyzer

Rigaku



The NEX OL is an in-line liquid analyzer for real-time multi-element detection and process control by Rigaku Solutions.

- Real-time in-line elemental measurement
- Designed for continuous process control
- Suitable for challenging industrial liquids
- High reliability and uptime performance

XRF SPECTROSCOPY

Near Infrared Spectroscopy Handheld NIR



- Handheld & wireless NIR
- Ideal for Raw Material Identification (RMID)
- Inbuilt chemometric packages
- Quantitative and Qualitative analysis
- Rugged & IP Rated.



Handheld RAMAN Analysis for Raw Material Identification



- Raw Material Identification for the chemical and pharmaceutical markets
- CFR compliant software
- Rapid Screening using onboard library ~13,500 materials
- IP Rated
- Barcode scanner.



UV-Vis Spectroscopy



The SPECORD PLUS UV/Vis is a high precision double-beam spectrophotometer for UV/Vis analysis in routine and complex applications by Analytik Jena Solutions.

- Precise UV-Vis spectral measurement
- Intuitive software for data handling
- Robust performance for QC & research
- Suitable for routine and advanced labs.



Process Analytical Technology (PAT) - NIR



- Online process analysis using NIR
- ATEX rated devices
- Wired and Wireless technology
- Blending monitoring
- Available for liquids & powders
- OPC integration.



Lab Automation Solutions

HF Innovation's bespoke lab automation solutions boost efficiency and accuracy with modular systems tailored to your workflow.

- Custom setups for sample handling and testing
- Reduces manual labour and human error
- Scalable, future-proof robotic integration



LAB AUTOMATION



FOG and TPH Analysers

The Infracal 2 analyser (InfraCal 2) is the ideal choice for fast analysis of oils and greases in various environmental and waste waters and soil. The instrument is portable and easy to use.

It analyses quickly and accurately measure TOG (total oil & grease), FOG (fats, oil and grease) and TPH (total petroleum hydrocarbons) in produced water, industrial wastewater and soil, from sub ppm up to 15%.



Model 501 Fluid Bed Dryer

Model 501 Fluid Bed Dryer ensures fast and homogenous drying of samples such as powders, chemicals, foods etc. 5kg of wet "ideal" sample (80% moisture) can be dried in 15-20 minutes (5 Litre tub).

Heating the incoming air and managing air flow rate through the sample, a Fluid Bed Dryer provides thorough mixing and maximum contact of solid with moving air.



Macro-Analyser for C/S/Cl

The multi EA 4000 is the ideal partner for your solids analysis, offering safe automation, enhanced analysis precision and reliability thanks to patented innovative solutions.

- For dedicated solids analysis of carbon, sulphur and chlorine.
- Can handle up to 3g sample mass to ensure homogenization
- Can measure from ppm to percentage levels
- Options available for TC, TOC, TIC, EC, AC, OC, RC and BOC.

Van Der Heijden Chillers



The Lab Chiller KÜHLMOBIL is a precision cooling system designed to deliver stable temperature control between 0-22°C for laboratory applications requiring consistent thermal management.

- Precise temperature stability
- Reliable cooling for lab instruments
- Optimised 0-22°C operating range.

TOC/TN Analysers



- Can handle both liquid and solid samples.
- Can perform fully automated analyses.
- High temperature combustion and direct injection options
- Wide working range (up to 30000ppm) without sample dilution
- Furnace and NDIR detector have 5-year warranties

AOX Analyser (Organic Halogens)



- Automated AOX analysis for ISO 9562 compliance.
- Fully supports new UK legislation being introduced for wastewater analysis.
- Range of sample preparation options for all levels of throughput.
- Low cost, low sample numbers through to fully automated configurations available.

Huber - Thermal Control

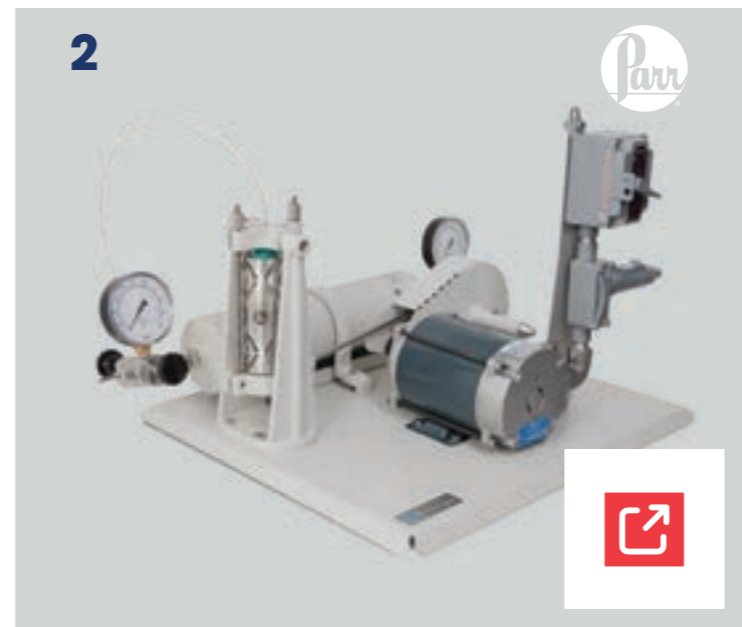


We offer dynamic temperature control systems. Re-roll coolers as well as classical heating and cooling thermostats, if required individually for your application.

- Down to -120°C and up to +425°C
- Dynamic Temperature Control Systems
- Baths and Circulators.

At SciMed we take pride in helping scientists, engineers and technicians solve their analytical and process challenges.





1 Acid digestion vessels

- Parr's Vessels for lab sample analysis.
- Parr's vessels for acid digestion tasks.
- Hydrothermal Creation
- Solvothermal Creation
- Handling potent acids (HF, Aqua Regia)
- Geological sample digestion.

2 Shaker hydrogenators

- Parr Shaker: compact system
- Easily operated hydrogenators
- Treats with hydrogen, catalyst
- Max 5 atm, 80°C
- For Hydrogenation Reactions
- Reduction, Condensation uses.

3 Stirred High Pressure Reactors

- Stirred reactors: lab scale
- Overhead mechanical stirring
- 25ml-100L, customizable
- Choice of material of construction (316SS, Alloy C276, Alloy 400, Alloy 600 and others)
- Max 345 bar pressure
- Up to 500°C temperature.

4 Non-Stirred High Pressure Reactors

- No agitation: cost-effective
- Non-stirred high pressure
- Ideal for extreme conditions
- 25ml-100L volume
- Choice of material of construction (316SS, Alloy C276, Alloy 400, Alloy 600)
- 544 bar, 538°C max.

5 Complete/ Custom High Pressure Solutions

- Parr: specialty reactor systems
- Embodies innovation spirit
- Fully customizable design
- Turnkey solutions offered
- PLC control integrated
- Full service: design to commissioning.

6 Flexi-Hyco for Delivery of Ultra Pure, High Pressure Hydrogen

- Flexi Hyco: increased safety
- Reduces high-pressure hydrogen
- 10-200 bar operating range
- 10 bar inlet pressure
- Uses metal hydride bed
- Optional hydrogen electrolyser.



SFE Extraction

CO₂ is a renewable and tuneable extraction solvent ideal for natural products.

- Tuneable solvent density
- Selective and mild extraction
- Accurate pressure control.



Extraction Screening System (ESS)

8-position automated sample preparation system using CO₂ as the extraction solvent.

- Quick and clean extractions
- No solvent residues in the extracted material
- Full automated control.



High Pressure CO₂ Pump

High Pressure CO₂ pumps.

- Pumps available with flow rates from 5g/min upto 1kg/min
- Maximum discharge pressures exceeding 1000 bar
- Robust and reliable.



Core | Water System

The Core | Water system is a subcritical water extraction system that is capable of extracting a wide range of compounds from various materials.

The use of water as the extraction solvent has several advantages over traditional organic solvents, including its ability to be tuned by temperature and pressure.



Core | Counter Current Column

The Core | Counter Current Column is a multi-stage liquid-liquid extraction system that uses supercritical CO₂ to extract volatile compounds from a feed solution.

The system produces two streams: a raffinate, which is depleted of the volatile components, and an extracted phase, which contains the desired compounds.

Advanced Supercritical and Subcritical Fluid (SCF) extraction systems that harness true power of carbon dioxide as a solvent.

"Where Engineering Meets Application"

APPLICATION #1

Material Testing

Did you know...

Our pumps are used along side H₂S to generate environments used for corrosion testing in oil and gas pipe lines?



Find out more >>

APPLICATION #2

Particle Engineering

Did you know...

Our PUMPS are used in both the chemical and pharmaceutical industries to explore particle engineering?



Find out more >>



Refractometers

Benchtop refractometers for measuring refractive index in a range of products and applications.

- Measure liquid and solid samples
- Customised scale options available
- Flat sample chamber and flow through
- 21 CFR part 11 ready options available
- Compliance with international standards.



Density Meter

Practical benchtop density meter with sleek design offers precise and reliable measurements of pharmaceutical products.

- Multi-user concept and control via touchscreen, PC, tablet or Smartphone
- Fast temperature control (10 - 95 °C)
- Easy cleaning and maintenance free
- Compliant with 21 CFR part 11 .



Polarimeters

Full range of benchtop polarimeters for production and R&D laboratories.

- Modular concept allows for a custom-configured polarimeter including accessories.
- Reliable high precision
- Multiple wavelength options
- 21 CFR part 11 ready options available
- Compliance with international standards.
- Access, store, and retrieve lab data from anywhere.

We develop and produce high-quality laboratory instruments, in-line process refractometers and automation solutions for industrial measurements.



Gas Humidity



Flexiwet is a standalone humidity generator.

- Up to 95% RH.
- Operates with Air, He, Ar, N₂, or CO₂
- Heated transfer line coupling.

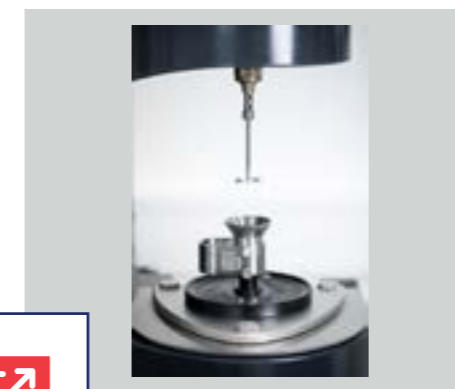
Gas Sorption



GASPRO is a gas sorption/desorption measurement instrument.

- Based on Sieverts Volumetric Method
- Vacuum up to 200bar
- Temperature range -260°C to 500°C.
- Wide range of sample type.
- Kinetic, pressure-composition isotherms and cycling measurements.

Powder flow accessory for Rheometer



Get powder flow properties from your Rheometer

- Compatible with all Thermo MARS Rheometers
- Tests for: Powder Flow, Compressibility, Flowability Energy, Flow rate Index
- Easy to upgrade onto existing systems
- Suitable for all powders.

Powder Flow Testing



Dr. Dietmar Schulze
Powder testers & software



Complete range of Ring Shear Testers, the gold-plated standard for testing powder flowability.

- Tests yield locus, flow function and wall friction angle
- Ultra-low stress capabilities
- Time consolidation for caking tests
- Computer aided hopper design software.

Apparatus for Vapor Pressure Determination



Get precise measurements and design efficient chemical processes with our vapor pressure determination system. Utilising the static total pressure method, our custom dual vessel system accurately measures vapor pressure dependent only on temperature. The system features a heated, temperature-controlled aluminum block to ensure accurate measurements.



Matex Phase



MATEX solutions use a sensor technology based on a magnetic principle for non destructive, fast and reliable measurements, to best address your product challenges

- Measurement is independent of structure and material shape.
- Unique solution for quality control of ferromagnetic compounds.



Rotating Cage Apparatus



Our high pressure, high temperature RC system is perfect for evaluating corrosion inhibitors in oilfield and refinery applications. This system includes a reactor system with a rotating cage, gas and liquid feed systems, reflux condenser, pressure controller, and control and data logging system. Components can be customised to meet specific testing requirements.



Electron Paramagnetic Resonance (EPR)



The EPR200 X-band pulse electron paramagnetic resonance (EPR or ESR) spectroscopy offer the capabilities of both continuous-wave EPR and pulse EPR functions. This allows the user to carry out both the conventional continuous-wave EPR experiments while performing T1 /T2 / ESEEM (electron-spin echo envelope modulation).



Gas Pycnometer Density Analyzer EASY-G 1310



- Advanced Surface Area, Pore Size Equipment.
- CIQTEK product with global standard certifications.
- Uses static volumetric method for precision.
- Analysis range: 0.0005 m²/g to 500nm.
- Features molecular pump for accurate measurements.
- Intelligent software ensures seamless testing experience.



CLIMBER Series for BET Surface Area & Porosimetry Analyzer



- Advanced equipment for surface area analysis.
- Utilizes static volumetric method for precision.
- Offers wide pore size analysis range.
- Features four simultaneous sample analysis stations.
- Integrates molecular pump for accurate measurements.
- Includes intelligent software for easy use.



Education Center



At SciMed, we not only seek to supply all laboratories with our state-of-the-art analysers and equipment. We also aim to share our knowledge and expertise with users and anyone in the community that wishes to develop their skills and knowledge on the technologies that we provide.



Webinars, Seminars & Training



At SciMed, we're dedicated to not only supplying state-of-the-art equipment but also educating our customers. Through seminars and training with our partners, we aim to equip you with the latest knowledge and skills to fully utilise the technologies we provide. Enhance your expertise and stay ahead with SciMed.





The Minilab Series

The Spectro-Scientific Minilab series offers lab-quality data at the point of sampling providing immediate actionable results based on key parameters such as oil chemistry & viscosity, fluid contamination and wear metals and particles.

- Modular design combines up to 4 instruments to suit required parameters.
- Rapid on-site analysis in minutes offers predictive maintenance for industrial machinery
- Minimise costly repairs & downtime for mission-critical assets.
- Simple-to-use TruVu software offers automated, customisable diagnostics to inform on-site maintenance strategies.



FluidScan Handheld IR Lubricant Condition Monitor

The FluidScan represents the state-of-the-art in infrared technology offering a portable tool to assess the condition of lubricants such as hydraulic fluids, engine oils, turbine oils and gear oils for degradation and the presence of contaminants.

- Readily determines a broad scope of condition parameters including; TAN, TBN, oxidation, nitration, soot, water, glycol, additive depletion and fluid contamination.
- Hand-held, portable design with 6-8 hr battery life.
- Comprehensive in-built fluid library with over 700 fluids.
- Can be combined as part of the Minilab series.



LNF 200 Series Wear Particle Counter and Classifier

The LNF 200 series is the industry leading particle analyser for lubrication and hydraulic fluids for use in industrial facilities, power generation plants and commercial laboratories. Features include:

- Particle count, size distribution and reporting to standard codes (ISO, NAS, NAVAIR, SAE, HAL and user defined bins).
- Imaging and particle morphology classification (>20 µm) for cutting, sliding, and fatigue wear along with non-metallics and fibres.
- Two-stage Ferrous monitor for distinction of large ferrous debris and total ferrous content (ppm)
- Can be combined as part of the Minilab series.



FieldLab 58 Portable Oil Lab



FieldLab 58 is a battery-powered, integrated oil analysis system that provides quick and comprehensive oil analysis in the field. Features include:

Rugged design for on-site remote use.
20 oil parameters reported in <10 mins.
Built in touch-screen controller for measurement and data reporting.



FDM 6000 series Fuel Dilution Meter



The FDM 6000 series is a portable analyser that measures direct fuel dilution in engine oil, offering lab quality results when needed. Features include:

0.2 to 15 % fuel dilution measurement range.
<60 testing time and no need for solvents.
Onboard memory stores up to three calibrations.
Can be combined with the Minilab series.



Spectroil 100 Series Rotating Disc Electrode



The Spectroil 100 series RDE-OES technology enables trace-level detection of wear metals and additives. Its simplicity and ease of use make it ideal for on-site predictive maintenance teams. Features include:

Rapid analysis of up to 31 elements.
No need for solvents or gases.
Can be combined as part of the Minilab series.



FerroCheck 2000 Series



FerroCheck 2000 Series is a precision portable ferrous metal analyser for in-service lubricating oil and grease, delivering rapid total ferrous measurement in under 30 s for field and lab use.

- Portable, battery-powered design
- Total ferrous content in ppm
- Fast results (≤ 30 s)





Automatic Pensky-Martens Closed Cup Flash Point

- Conforms to ASTM D93 and related specifications
- Electric or Gas ignition
- Integrated Dual Fan System directly cools test cup and surrounding environment
- 8.4" LCD Touch Screen Interface and Integrated Windows PC allows for easy viewing and navigation
- Fire Suppression System floods instrument with inert gas in the event of a fire.



Kinematic Viscosity Bath

Constant temperature bath with advanced temperature control circuitry for convenient, accurate glass capillary viscometry determinations

- Conforms to ASTM D445 and related specifications
- Accommodates 7 capillary viscometers
- Microprocessor temperature control between 20 and 100 °C .



Automatic Cleveland Open Cup Flash Point Tester

Introducing the Automatic Cleveland Open Cup Flash Point Tester, for precise flash and fire point testing in accordance with ASTM D92 and related specs.

Its integrated Dual Fan System ensures accurate results, while safety features make it safe to use. Perfect for labs, QC departments, and R&D teams.

Precision Liquid Immersion Equipment



The Precision series of liquid immersion equipment is available for all of the following ASTM test methods: D130, D1838, D7667 Copper and Silver Corrosion D1298 Density by Hydrometer D525, D873 Oxidation Stability of Gasoline D942 Oxidation Stability of Lubricating Greases D2274, D2440, D2893 Oxidation Stability of Mineral, Lubrication, and Fuel Oils.

ATF Lubricity Test Rig (BOCLE)



Designed as per ASTM D5001 to assess wear aspects of the boundary lubrication properties of aviation turbine fuels on rubbing steel surfaces.

Includes integrated touch screen Windows based PC, software and microscope

Essential for Sustainable Aviation Fuel Testing.

Automatic Cloud and Pour Point Analyser



Automatic determination of cloud point by Optical Detection and Automatic determination of pour point via the Automatic Tilt Method

Conforms to the specifications of ASTM D5771 and D5950 Excellent correlation to ASTM D2500, D97, and related specifications Wireless Cloud Point Head and Wireless Pour Point Head 10.4-inch Integrated Industrial Color Touch Screen.

Automated Air Release Value Analyser



- Conforms to ASTM D3427, IP 313 and related specifications
- Integrated Touch Screen Control Panel
- Automatic Lift System
- Automatic calculation of final sample density
- Integrated Balance
- LIMS Compatibility.

At Koehler, we pride ourselves in innovation. In a time of continuous technological advancement and transition we are constantly implementing new and improved ways to surpass the needs of an ever-evolving industry.





Water Washout Tester

Rotates a lubricated ASTM ball bearing at 600rpm in a modified bearing/housing assembly while impinging the bearing with a jet of water at the specified flow rate and temperature. The tared bearing and bearing shields are weighed before installation in the bearing housing and again after testing and drying to determine the amount of sample loss.

Conforms to ASTM D1264, D4950 and related specifications.



Automatic Microscale Continuously Closed Cup Flash Point Analyser

The Koehler K24880 Microscale Continuously Closed Cup Flash Point Analyser offers accurate flash point measurement with a small 1-2 mL sample requirement, reducing test costs and pollution. Its automatic operation, built-in refrigeration, and industrial touch screen interface ensure user-friendliness and safety, while conforming to various ASTM, IP, EN ISO, ISO, SH/T, DL/T, and GB/T specifications.



K24875 RVP Pro Benchtop Automatic Vapour Pressure Analyser

The K24875 Automatic Vapour Pressure Analyser is an automated instrument to determine vapour pressure of volatile petroleum products. Conforms to ASTM D5188, D5191 and D6378.

- Fast, automated analysis
- Inbuilt intuitive 8" colour touchscreen
- Integrated sample shaker with locking mechanism
- Can store up to 50,000 results
- Fully automatic sample introduction.

CompEAct Elemental Combustion Analyser



The CompEAct is latest generation in elemental combustion analysers from Analytik Jena.

- S and N systems available
- Dedicated liquids, gases and LPG analyser
- Built-in touchscreen for simplified operation
- MPO detector for S analysis: overcomes interference issues from presence of N.



Accessories and Standards for Petrochemical Testing Methods



- ASTM Thermometers
- Diffuser Stones, certified and non-certified
- Penetrometer Cones and Accessories
- Certified Petroleum Reference Standards
- Kinematic Viscometer Tubes and Accessories.



Ramsbottom Carbon Residue Apparatus



The thermostatically controlled coking furnace determines the carbon residue left after evaporation and pyrolysis of a sample oil, providing an indication of deposit(1) forming tendencies of fuels and guidelines for processing refinery products. The cast(1) iron furnace reaches the standard test temperature of 550°C rapidly and controls with $\pm 1^\circ\text{C}$ stability. The apparatus conforms to ASTM D524 and IP14.



High Performance Elemental Combustion Analyser



The EA 5100 analyser for liquid, gaseous, solid and LPG samples:

- Handle any sample type and matrix for ultimate flexibility
- Can measure C, S, N and halogens from ppb to % levels
- Built-in methods already in software library
- Compatible with huge number of legislative compliance methods, e.g. ASTM's, DIN's and ISO's.



Koehler Instrument Company is more than just an instrument manufacturer. We are committed to providing you with full support for your laboratory testing needs, We take care of you through the whole process.





SP20 Automated Smoke Point Tester

Conforms to ASTM D1322, D1655, IP 598, DEF STAN 91-091

The automation of the smoke point test introduced by AD Systems greatly improved the precision of this test compared with the manual method, and consequently has become the referee test method in jet fuels specifications.



VD10 Atmospheric distillation of Fuels and Solvents

Conforms to ASTM D86, D850, D1078: IP123, IP195 other methods.

Distillation of Petroleum Products and Liquid Fuels using Innovative Video Distillation. = With no need for programming or optimisation, the VD10 performs the perfect distillation test from the first sample, even for unknown and difficult samples such as biofuels.



TO10 Thermal Oxidation Stability of Aviation Fuels for JFTOT

Oxidation Stability Test Rig for JFTOT ASTM D3241, IP 323, ISO 6249, ASTM D1655, D7566, D4054, DEF STAN 91-091

The TO10 offers perfect control of sample flowrate, volume and pressure, combined with unparalleled precision of heater tube temperature profile control.

DR10 ITR Heater Tube Deposit Rater



Conforms to ASTM D3241.

The DR10 test report provides a 3-D profile of the deposit distribution on the tube surface. The software automatically detects and reports the Standard Spot value as defined in ASTM D3241. The average and the maximum thickness deposit values, as well as the calculated total deposit volume are reported.

CT10 Corrosion Rater



Conforms to ASTM D665, D7548 NACE TM0172 IP 135 ISO 7120 JIS K2510 GOST 19199.

The CT10 Corrosion Rater which automatically calculates the exact percentage of the corroded area based on a homogeneous lighting source, CCD camera, specimen rotation system, and specially designed application software.

CB10 Automated Corrosion Bath



Conforms to ASTM D665, D4378, NACE TM0172, IP 135.

The CB10 has automatic test specimen positioning so that two tests can be run unattended simultaneously and independently. All the parameters such as test timing, water injection volume, temperature and specimen insertion are precisely controlled.

SV10 Automated S Value Intrinsic Stability of Asphaltenes



Complies with ASTM D7157, ISO PAS 23263 and CIMAC guidelines.

The AD Systems SV10 is a fully automated asphaltene stability (S-value) analyser that delivers fast, precise intrinsic stability and blending data for crude oils, heavy fuels and residues.

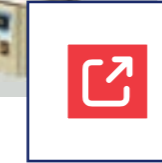
AD Systems specialises in developing and servicing test equipment for analysing fuel and lubricant properties, known for setting industry standards across the global petroleum sector.



Adiabatic Calorimeter

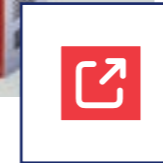
The TAC-500AS is an adiabatic calorimeter (high phi factor) which can run from ambient to 500°C. During an experiment both the sample temperature and pressure are recorded under adiabatic (no heat loss) conditions.

- High phi adiabatic testing
- Max Temperature 500°C.
- Pressure measurement.



Vent Sizing Package 2

The Fauske VSP is a laboratory tool which allows a hazards assessor to collect precise 'off-normal' process design data. Using the VSP calorimeter, experiments can be performed to model upset scenarios such as loss of cooling, loss of stirring, mischarge of reagents, mass-loaded upset, batch contamination and fire exposure heating.



Thermal and Pressure Analysis System

The RSC-400AS is thermal screening tool capable of measuring temperature and pressure as materials are heated.

It has the added advantage of being able to run 2 samples at the same time up to 400°C.

ATLAS HD Reaction Calorimeter



Reaction calorimetry is a non-intrusive, non-destructive, real time technique that yields valuable process data.

- Chemical Reaction Calorimetry measurement under process like conditions.
- Heat of Reaction
- Heat flow for scale up
- Process optimisation.

Advanced Reactive System Screening Tool (ARSST)



The ARSST is a low phi (thermal inertia) pseudo adiabatic screening tool.

As the name implies it is well suited for basic process safety screening tests able to measure temperature and pressure rise rates.

High Pressure Power Compensation Reaction Calorimeter



Parr introduces power compensation calorimetry for its reactor systems, allowing for direct and intuitive quantification of process power and reaction enthalpy. This technique requires a jacketed vessel, compensation heater, and process controller, and offers rapid results and real-time reaction completion verification.



SciMed is your dedicated source for process safety testing, offering advanced tests, software, and expert guidance for all safety needs.



ThermoFisher
SCIENTIFIC

HAAKE Falling Ball Viscometer

The Falling Ball Viscometer can be used to measure the absolute value of the kinematic viscosity of transparent Newtonian liquids and even gases.

- Measuring accuracy when supported with the precise temperature control of a circulator is among the highest available in any type of viscometer
- Meets the requirements of ISO 12058.



ThermoFisher
SCIENTIFIC

HAAKE Viscotester 3

The HAAKE Viscotester 3 is a portable Viscometer to measure viscosity in the lab, field, or production.

- Colour-coded rotors with "Select Assist" functionality
- Use with re-chargeable batteries or external power supply
- Lab stand available.



ThermoFisher
SCIENTIFIC

HAAKE Viscotester iQ Rheometer

The Viscotester iQ is a modular and intuitive rheometer, designed with maximum flexibility for QC requirements.

- Peltier temperature control
- Use standalone, RheoApp supported or with RheoWin software
- Available with Ball bearing suspension for routine applications or air bearing when additional sensitivity is required.



ThermoFisher
SCIENTIFIC

HAAKE MARS iQ Rheometer

The MARS iQ Rotational Rheometers offer reliable, intuitive and flexible rheological measurements:

- Designed for the QC laboratory to provide fast and reliable results.
- A touchscreen enables standard operating procedures to be launched directly from the rheometer
- "Connect Assist" functionality guides users through easy operation and failure-free measurement.
- Available with either the ball bearing or air bearing system to suit your lab.



ThermoFisher
SCIENTIFIC

HAAKE MARS 40/60 Rheometer

The highly flexible Modular Advanced Rheometer System (MARS) provides accurate results, easy handling, and application-driven solutions for material characterisation.

- "Connect Assist" functionality allows for effortless exchange of measuring geometries, temperature modules and accessories to speed up your workflow.
- Broad range of accessories to handle new analytical requirements, including RheoScope module for micro viewing and Rheonaut module for FTIR analysis.

Optimise Powder Flow with Confidence

Powder Rheology Solutions with the HAAKE™ MARS™ Rheometer

ThermoFisher
SCIENTIFIC
EXCLUSIVE DISTRIBUTOR



What can you measure?

- Basic Flowability Energy (BFE)
- Stability Index (SI)
- Unconfined Yield Stress (UYS)
- Major Principal Stress (MPS)

All delivered through SOPs using RheoWin™ Software.

Powder flow impacts everything, from dosing accuracy in pharma to print quality in additive manufacturing. That's why Thermo have made it easier than ever to standardise, measure and master powder behaviour.

- Plug-and-play universal powder toolbox
- Compression, shear, and flowability testing
- Fast setup with no tools required
- Pre-set SOPs with intuitive touchscreen control
- Supports a wide range of industries: pharma, additive manufacture, coatings, food, and more...

Upgrade to Powder Rheology

Contact us to explore the universal toolbox and software add-ons for your existing HAAKE MARS iQ

Contact Us Today >>



Get the most information from your material with Thermo Scientific rheometers and viscometers, designed to accurately measure the properties of fluids and other complex materials.

ThermoFisher
SCIENTIFIC



FLUXANA®
XRF Application Solutions

Gas and Electric Fusion for XRF and ICP

The Fluxana range of gas and electric fusion systems is backed by decades of experience and uses unique, patented technologies for precise, reproducible fusion of a wide range of materials.

- Automated systems for maximum efficiency and sample throughput
- Enhanced sensors and safety features for optimum sample and user protection
- Options for automated flux dosing for efficient and precise sample weighing
- Suitable for XRF and ICP sample preparations.



FLUXANA®
XRF Application Solutions

Pellet Press and Dies

The Fluxana Vaneox range of hydraulic presses offer robust, high-quality sample pressing.

- 15 – 40 tonnes pressing capacity.
- Manual, electric, and automated operation available.
- A range of compatible dies with sample diameters of 8 – 52mm.
- Suited to XRF sample preparations for ground powders such as cements, geological material, and polymer powders.



FLUXANA®
XRF Application Solutions

Sample Cups and Films for XRF

Wide range of sample containment and support solutions for analysis of liquids and loose powders by XRF including:

- Sample cups and cells
- High-transmission support films
- Sample binders and waxes for pellet preparation
- Consumables compatible with ALL major XRF manufacturers' systems.

XRF Application Sets and CRMs



FLUXANA®
XRF Application Solutions

- Fluxsearch® database offers comprehensive details of thousands of CRMs and RMs with user-friendly search function.
- Comprehensive range of CRMs and XRF glass monitors available to buy.
- Calibration sets offering out-of-the-box solutions for XRF applications including Cement, Iron Ores and Slags, Refractories and Glass.

Microwave Digestion



scpscience
an analytichem company

- Uses digestion modules for full sample throughput flexibility; from six through to twenty-four samples
- Can cool samples in under five minutes
- Individual vessels are monitored for temperature for rapid and full digestion feedback
- Unique 75ml vessel design (quartz or Teflon) virtually eliminates over-pressure events.

Acid Digestion Blocks and consumables



scpscience
an analytichem company

- Corrosion-resistant graphite heating block
- Temperature uniformity: $\pm 0.1^\circ\text{C}$; accuracy: $\pm 3^\circ\text{C}$
- Capacity options: 9 to 72 positions, for 15ml to 100ml tubes
- Three models allow digestion up to 450°C
- Digitubes with ultra-low metal content and Class A 50ml graduation.

Automatic Fusion & LOI/LOF System



N

- Electric furnace,
- From 4 to 16 bead models available (Easily expandable),
- Single crucible
- LOI / LOF / GOI in the same fusion cycle
- Simple, Reliable, MODULAR, Robust construction.



Simultaneous Thermal Analysis (STA)

A powerful combination of simultaneous DSC/DTA and TGA measurements.

- Temperature Range up to 2400°C with single furnace.
- Wide variety of atmosphere conditions.
- Plug and play modular options
- High sensitivity balance.
- Variety of models to meet your requirements.



- Temperature Range -170°C to 830°C
- Measurements possible up to 1000 bar pressure
- Flat (2D) or Calvet (3D) Sensor for superior performance.



Oxygen Bomb Calorimeters

- Microprocessor control ensures consistent and reliable results.
- Versatile: Tests waste, fuel, coal, oil, food.
- Precision: Parr 1108 oxygen bomb ensures accurate results.
- Efficient: Up to 6 tests/hour, minimal intervention.
- USB/Ethernet connectivity, multilingual touch interface for easy use.



3D Calvet Calorimetry

- 3D sensors & Joule effect calibration for accurate heat flow
- Sample & reference in thermocouple array
- 95% efficient sensor vs ~30% plate detectors
- Various conditions: mixing, pressure, heat capacity, gas flow
- Temp range: -196°C to 830°C
- Pressure: up to 1000bar
- Battery testing & drop calorimetry
- Large volume nuclear calorimeter.



Evolved Gas Analysis (EGA)



Analysing gases produced during thermal analysis is crucial. Our STA and TGA instruments can be coupled with FTIR, MS, and GC-MS options for gas analysis, aiding understanding of material properties.

Coupling to all major brands of instruments is available.

Thermomechanical Analysis (TMA)



TMA is a technique to measure the change in dimension of a sample as function of temperature.

- Temperature range : Ambient to 2400°C
- Max sample size: 20mm high x 10mm diameter
- Measuring range : +/- 2mm.

High Mass /High Throughput TGA



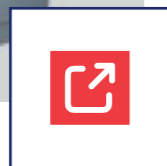
- TGA measures the mass loss/gain of a sample as it is heated
- This Batch TGA can use samples up to 10g
- Can run up to 40 samples in one batch and operates up to 1000°C
- Can be fully automated with robot systems for continuous unattended operation.

Thermogravimetric Analysis (TGA)



TGA measures the mass loss/gain of a sample as it is heated under controlled conditions.

- Temperature range up to 2400°C.
- Wide variety of atmospheric conditions.
- Pressure TGA available.
- Range of top loading and hang-down systems
- Can be hyphenated for evolved gas analysis.

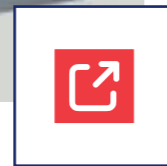


Heat-Check SV

Heat Check SV is a calorimeter that utilises a non destructive method measuring the heat released during the decay of radioactive materials.

This instrument is designed for containers up to 15 litres delivering precise quantification of radionuclides (e.g., tritium, plutonium).

Featuring high-sensitivity thermal detection, it provides rapid and accurate results.



Heat-Check MV

Heat Check MV is a calorimeter that utilises a non destructive method measuring the heat released during the decay of radioactive materials.

This instrument is designed for containers up to 60 litres delivering precise quantification of radionuclides (e.g., tritium, plutonium).

Featuring high-sensitivity thermal detection, it provides rapid and accurate results.

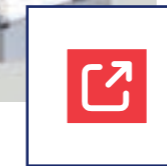


Heat-Check LV

Heat Check LV is a calorimeter that utilises a non destructive method measuring the heat released during the decay of radioactive materials.

This instrument is designed for containers up to 380 litres delivering precise quantification of radionuclides (e.g., tritium, plutonium).

Featuring high-sensitivity thermal detection, it provides rapid and accurate results.



Heat-Check Ultra

Heat Check Ultra is a calorimeter that utilises a non destructive method measuring the heat released during the decay of radioactive materials.

This instrument is designed for containers up to 40 litres and has a unique detection limit of 100 microwatt delivering precise quantification of radionuclides (e.g., tritium, plutonium).



Heat-Check Fast

Heat Check Fast is a non destructive decay heat calorimeter engineered for rapid quantification of radioactive materials.

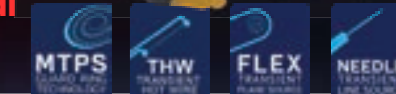
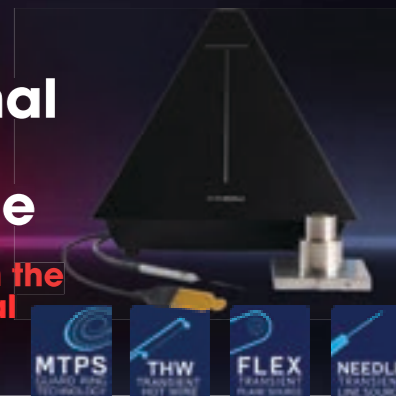
Utilising advanced power compensation sensing, it delivers accurate and precise results up to 30% faster than traditional calorimeters on containers up to 15 Litres.

Advanced Calorimetry Systems for Waste Characterisation
From small-scale analysis to full drum testing - engineered for accurate heat measurement across all waste types.



C-THERM Measure Thermal Conductivity with Confidence

Multi-Method Testing with the
C-Therm Trident™ Thermal
Conductivity Instrument



Thermal conductivity impacts product performance, safety and compliance across industries. From battery materials to polymers and composites, reliable data is critical.

- Four Methods in one instrument
- Modified Transient Plane Source (MTPS)
- Transient Plane Source (TPS)
- Transient Hot Wire (THW)
- Transient Line Source (TLS)
- No extensive sample prep required
- Fast results in minutes
- Wide temperature capability.

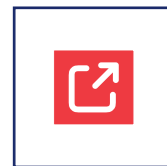
What can you measure?

- Solids and engineered polymers
- Liquids, oils and viscous fluids
- Pastes, gels and slurries
- Powders and granular materials
- Composites and layered structures
- Anisotropic and heterogeneous samples
- Insulation and low-conductivity materials
- High-conductivity metals and alloys.

Upgrade to Smarter Thermal Testing

Contact us to explore multi-method thermal conductivity testing for your materials.


Contact Us Today >>





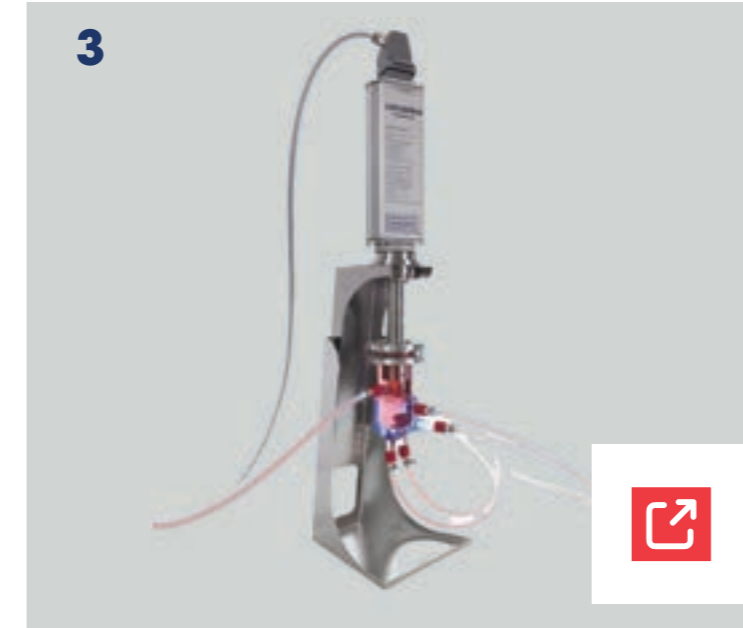
1 Hielscher Lab scale

- Compact, easy-to-use and extremely versatile
- Used for the processing of a variety of organic and inorganic materials
- Wide range of volumes from approx. 50µl to 2000ml
- Typical applications include sample preparation, disintegrating and cell lysis, homogenizing, dispersing and disaggregation, particle size reduction and the acceleration of chemical reactions (sonochemistry).



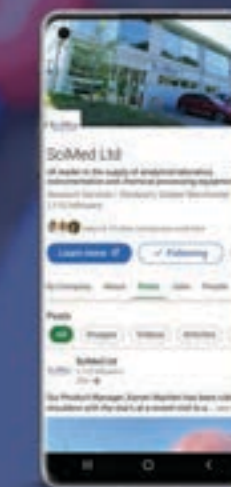
2 Hielscher Industrial Scale

- Powerful, efficient and reliable.
- Built to operate continuously at high load in industrial environments
- Up to 16 kilowatts per device
- Leading ultrasonics supplier for industrial liquid processes.
- Typical applications include dispersing, the milling of pigments in paints or inks, the formulation of high performance coatings with nanomaterials, the manufacturing of biodiesel, or the pasteurisation of food or beverages.

3 Flow cell reactors

- Well known and widely used for the processing small to large volumes
- Ultrasonic flow cells allow achieving uniform processing results
- Sonication factors such as retention time, process temperature and number of passages can be precisely controlled so that targets are reliably achieved.
- Hielscher flow cells and inline reactors come with cooling jackets for maintaining optimal process temperature.
- Flow cell reactors are available in various sizes and geometries in order to fulfil specific process requirements.



Social Media

We're a social bunch here at SciMed and wanted to let you know that we now have all our platforms up and running!

From the latest product video to what's new in the industry we want to keep you updated first.

For more information visit





SUPPLIER OF INSTRUMENTATION FOR ANALYSIS, TESTING, MEASUREMENTS, AND PROCESS SOLUTIONS


SciMED

Global Brands, Local Support

SciMed.co.uk



 SciMed Ltd
Unit B4 | The Embankment Business Park
Vale Road | Stockport | SK4 3GN

 +44 (0) 161 442 9963

 enquiries@scimed.co.uk

 Registration No. 1437361 / Cardiff.